



AIRSPEED INDICATORS

The airspeed indicator is an instrument which shows the speed of an airplane through the surrounding air. The actual speed of the airplane relative to the ground can be determined by applying suitable corrections to the indicated airspeed.

In determining the airspeed, the instrument utilizes the principle that the differential between the pitot and static air pressure is a direct indication of velocity. The source of the pitot and static air pressures is a pitot-static airspeed tube, or a combination of a pitot tube and a flush type static tube.

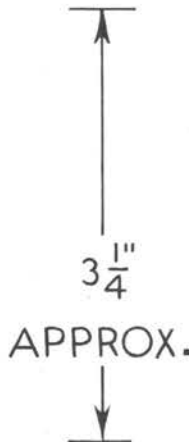
Pitot, or impact pressure, which is the result of the airplane's motion through the air, is delivered to a sealed diaphragm capsule inside the indicator. Static pressure, which is the atmospheric pressure existing at the airplane's altitude, is found outside the diaphragm capsule, but inside the airtight case. When there is a difference in the two pressures, due to motion through the air, the diaphragm expands or contracts. This movement is translated into angular motion of the pointer by a linkage system. The pointer moves around a dial calibrated in units of miles per hour.

Standard Army airspeed indicators are of two general types: the low-range and the high-range type. The low-range type has a pointer which makes one revolution over the total range of the dial with a maximum reading of 300 miles per hour. The high-range type indicates a maximum airspeed of 500 or 700 miles per hour. The sensitive indicator is a high-range type with a pointer which makes one revolution for each hundred miles per hour, and has an inner dial to indicate hundred-mile units.

Since it is the usual practice to connect all instruments utilizing static pressure (airspeed indicator, rate-of-climb indicator and altimeter) to a common manifold, the location of the connection to the instrument is important when interchanging instruments. The Army-Navy standard airspeed indicator case, AN5759, has the pitot connection in the center of the back of the instrument and a static connection on each side. These will supersede the present Army instruments, which have the static connection on the right-hand side, on the back of the instrument and the Navy instruments which have it on the back, left-hand side. In addition, Navy indicator dials are calibrated in knots. Because of these differences, Army airspeed indicators and Navy airspeed indicators are not considered interchangeable.



AIRSPEED INDICATORS INSTRUMENTS—FLIGHT



INDICATOR—AIRSPEED ARMY TYPE B-8

NAMES: Airspeed indicator
Indicator assembly—airspeed

Indicator—airspeed (aircraft) pitot-static

DESCRIPTION: The Army type B-8 airspeed indicator is a differential pressure measuring instrument used to indicate the speed of the airplane in flight. The dial face is designed for external fluorescent lighting.

CHARACTERISTICS:

- Dimensions..... approximately 3 1/4 by 3 1/4 by 2 1/8 inches
- Weight..... approximately 1 pound
- Range..... 20 to 200 miles per hour
- Dial size..... 2 3/4 inches diameter
- Lighting..... fluorescent and radioactive luminous markings
- Connections..... 1/8 inch internal pipe thread

RELATIONSHIP OF PARTS: Used with:

Pitot-static airspeed tube or a combination of a pitot airspeed tube and a flush static airspeed tube.

ARMY

A. E. REFERENCE NUMBER: 60-3900

SPECIFICATIONS:

- General..... 94-27187
- Detail..... 94-27974-B

TYPE DESIGNATION: B-8

A. S. C. STOCK NUMBER: Refer to chart.

TECHNICAL ORDER NUMBER: Refer to chart.

PRODUCTION STATUS: Under procurement.

SHIPPING DATA: Shipped as a complete unit.

NAVY

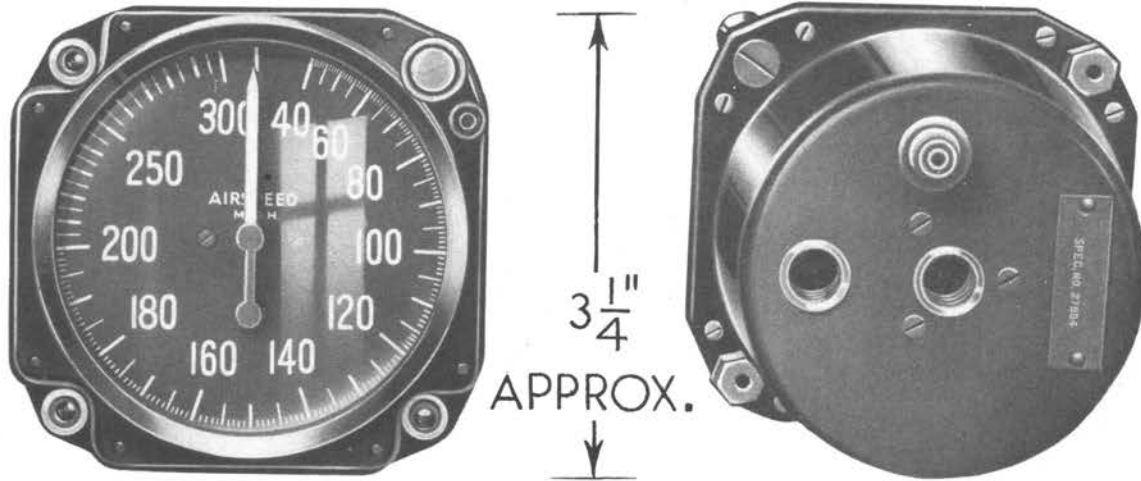
There is no Navy equivalent for this item.

ALL MODELS BELOW ARE INTERCHANGEABLE
Models are used in services as noted in column 3
A-Army, N-Navy, B-British, C-Commercial

Manufacturer	Manufacturer's Drawing Number	Used By	Air Service Command Stock Number	Army Technical Order Number	British Reference Number
United States Gauge Co.	AW-23/4-16-AH	A-B	6000176785	05-10-2	106A/849
	AW-23/4-16-AQ	A-B		05-10-2	106A/849
Pioneer Instrument Division	1426-2J-A1	A-B	6000176725		106A/849
	1426-2D-A1	C			
Kollsman Instrument Division	586K-027	A			
	657BK-0146	C			



AIRSPPEED INDICATORS INSTRUMENTS—FLIGHT



INDICATOR—AIRSPEED ARMY TYPE C-7

NAMES: Airspeed indicator
Indicator assembly—airspeed

Indicator—airspeed (aircraft) pitot-static

DESCRIPTION: The Army type C-7 airspeed indicator is a differential pressure measuring instrument, covering its full speed range in one revolution of the pointer. It has a marker which indicates maximum permissible diving speed of the airplane in which it is installed.

CHARACTERISTICS:

Dimensions	approximately 3 1/4 by 3 1/4 by 2 1/8 inches
Weight	approximately 3/4 pound
Range	40 to 300 miles per hour
Dial size	2 3/4 inches diameter
Lighting	individual 3 volt rim lamp
Dial markings	radioactive luminous material
Connections	1/8 internal pipe thread with type 81T fittings installed

RELATIONSHIP OF PARTS: Used with:

Pitot-static airspeed tube or a combination of a pitot airspeed tube and a flush static airspeed tube.

ARMY

A. E. REFERENCE NUMBER: 60-4000

SPECIFICATIONS:

General	94-27187
Detail	94-27804
Superseded	27804

TYPE DESIGNATION: C-7

A. S. C. STOCK NUMBER: Refer to chart.

TECHNICAL ORDER NUMBER: Refer to chart.

PRODUCTION STATUS: Not under procurement for initial installation. Superseded by Army type C-14 airspeed indicator.

SHIPPING DATA: Shipped as a complete unit.

NAVY

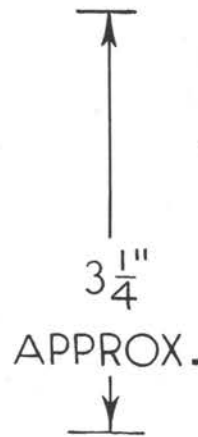
There is no Navy equivalent for this item.

ALL MODELS BELOW ARE INTERCHANGEABLE Models are used in services as noted in column 3 A-Army, N-Navy, B-British, C-Commercial

Manufacturer	Manufacturer's Part and Drawing Number	Used By	Air Service Command Stock Number	Army Technical Order Number	British Reference Number
Pioneer Instrument Division	1403-1N-B1	A-B	6000180500	05-10-2	106A/891
	1403-1C-E1	A-B			106A/891
	1403-1B-C1	C			
	1403-1N-D1	C			
U. S. Gauge Co.	AW-2 3/4-12	A-B	6000180250	05-10-2	106A/891
	AW-2 3/4-12-B	A-B			106A/891
Kollsman Instrument Division	586S-0110	A			



AIRSPEED INDICATORS INSTRUMENTS — FLIGHT



INDICATOR — AIRSPEED ARMY TYPE C-14

NAMES: Airspeed indicator
Indicator assembly—airspeed

Indicator—airspeed (aircraft) pitot-static

DESCRIPTION: The Army type C-14 airspeed indicator is a differential pressure measuring instrument used to indicate the speed of the airplane through the air. The dial face is graduated throughout the range of 40 to 300 miles per hour.

CHARACTERISTICS:

- Dimensions..... approximately 3 1/4 by 3 1/4 by 2 1/8 inches
- Weight..... approximately 3/4 pound
- Range..... 40 to 300 miles per hour
- Dial..... 2 3/4 inches diameter
- Lighting..... fluorescent and fluorescent radioactive markings
- Connections..... 1/8 inch internal pipe threads

RELATIONSHIP OF PARTS: Used with:

Pitot-static airspeed tube or a combination of a pitot airspeed tube and a flush static airspeed tube.

ARMY

A. E. REFERENCE NUMBER: 60-4200

SPECIFICATIONS:

- General..... 94-27187
- Detail..... 94-27952-B
- Superseded..... 94-27952-A

TYPE DESIGNATION: C-14

A. S. C. STOCK NUMBER: Refer to chart.

TECHNICAL ORDER NUMBER: Refer to chart.

PRODUCTION STATUS: Under procurement.

SHIPPING DATA: Shipped as a complete unit.

NAVY

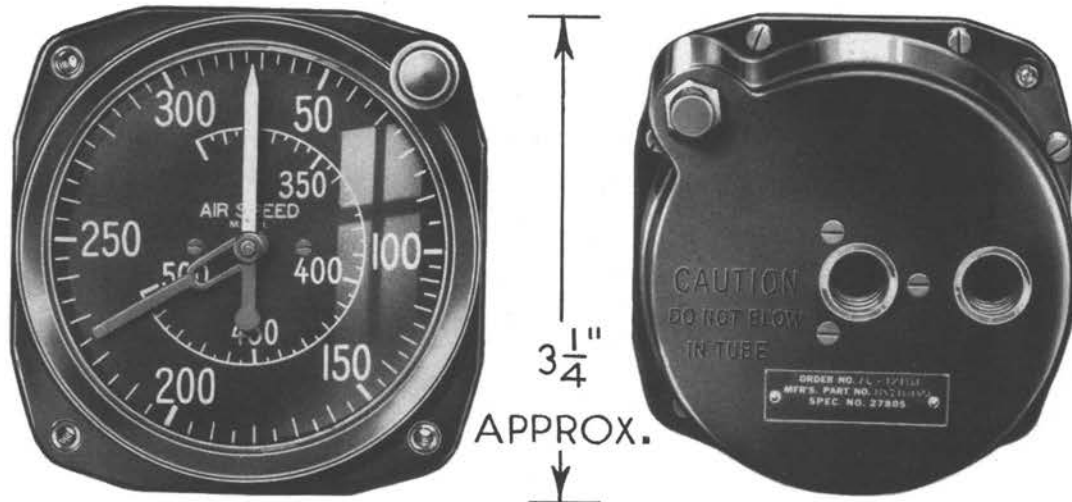
There is no Navy equivalent for this item.

ALL MODELS BELOW ARE INTERCHANGEABLE Models are used in services as noted in column 3 A-Army, N-Navy, B-British, C-Commercial

Manufacturer	Manufacturer's Drawing Number	Used By	Air Service Command Stock Number	Army Technical Order Number	British Reference Number
United States Gauge Co.	AW-23/4-16-U	A-B	6000182725	05-10-2	106A/921
Pioneer Instrument Division	1426-1Z-A1	A-B	6000182750	05-10-4	106A/921
	1426-1AE-A1	C			
	1426-1AD-A1	C			
	1426-1B-A1	C			
King-Seeley Corp.	32450	A-B	6000182755		106A/921
Kollsman Instrument Division	586BK-0110	A-B	6000182735		106A/921
	586BK-0148	C			



AIRSPEED INDICATORS INSTRUMENTS — FLIGHT



INDICATOR — AIRSPEED ARMY TYPE D-4

NAMES: Airspeed indicator
Indicator assembly—airspeed

DESCRIPTION: The Army type D-4 airspeed indicator is a differential pressure measuring instrument, covering its full speed range in one and two-thirds revolutions of the pointer. It has a marker which indicates the maximum permissible diving speed of the airplane in which it is installed.

CHARACTERISTICS:

- Dimensions..... approximately 3 1/4 by 3 1/4 by 3 1/16 inches
- Weight..... approximately 3/4 pound
- Range..... 50 to 500 miles per hour
- Dial..... 2 3/4 inches diameter
- Lighting..... individual 3 volt rim lamp
- Dial markings..... radioactive luminous material
- Connections..... 1/8 inch internal pipe threads

RELATIONSHIP OF PARTS: Used with:
Pitot-static airspeed tube, or a combination of a pitot airspeed tube and a flush static airspeed tube.

ARMY

A. E. REFERENCE NUMBER: 60-4400

SPECIFICATIONS:

- General..... 94-27187
- Detail..... 27805-A

TYPE DESIGNATION: D-4

A. S. C. STOCK NUMBER: Refer to chart.

TECHNICAL ORDER NUMBER: Refer to chart.

PRODUCTION STATUS: Not under procurement for initial installation. Superseded by Army type D-7 airspeed indicator.

SHIPPING DATA: Shipped as a complete unit.

NAVY

There is no Navy equivalent for this item.

ALL MODELS BELOW ARE INTERCHANGEABLE
Models are used in services as noted in column 3
A-Army, N-Navy, B-British, C-Commercial

Manufacturer	Manufacturer's Drawing Number	Used By	Air Service Command Stock Number	Army Technical Order Number	British Reference Number
Kollsman Instrument Division	586S-024	A-B	6000184750	05-10-2	106A/83
United States Gauge Co.	AW-23/4-13	A-B	6000184250	05-10-4	106A/83
	AW-23/4-13-C*	A		05-10-2	
Pioneer Instrument Division	1403-4E-D1	A-B			106A/83
	1406-4E-A1	A-B			106A/83

*Static connection rotated 180°.

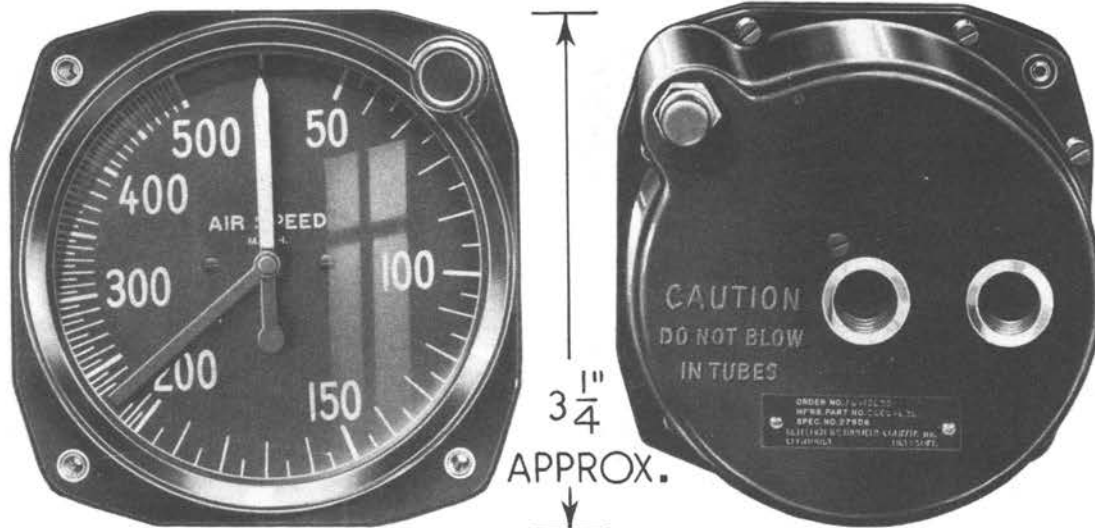
TYPE INTERCHANGEABILITY

A. A. F. Type
D-6

One revolution of pointer for entire range.



AIRSPEED INDICATORS INSTRUMENTS—FLIGHT



INDICATOR—AIRSPEED
ARMY TYPE D-6

NAMES: Airspeed indicator
Indicator assembly airspeed

Indicator—airspeed (aircraft) pitot-static

DESCRIPTION: The Army type D-6 airspeed indicator is a differential pressure measuring instrument, covering its full speed range in one revolution of the pointer. It has a marker which indicates maximum permissible diving speed of the airplane in which it is installed.

CHARACTERISTICS:

- Dimensions..... approximately 3 1/4 by 3 1/4 by 2 1/16 inches
- Weight..... approximately 1/2 pound
- Range..... 50 to 500 miles per hour
- Dial..... 2 3/4 inch diameter
- Lighting..... individual 3 volt rim lamp
- Connections..... 1/8 inch internal pipe threads with type 811 fittings installed
- Dial markings..... radioactive luminous material

RELATIONSHIP OF PARTS: Used with:
Pitot-static airspeed tube, or a combination of a pitot airspeed tube and a flush static airspeed tube.

ARMY

A. E. REFERENCE NUMBER: 60-4600

SPECIFICATIONS:

- General..... 94-27187
- Detail..... 94-27906-A

TYPE DESIGNATION: D-6

A. S. C. STOCK NUMBER: Refer to chart.

TECHNICAL ORDER NUMBER: Refer to chart.

PRODUCTION STATUS: Not under procurement for initial installation. Superseded by Army type D-7 airspeed indicator.

SHIPPING DATA: Shipped as a complete unit.

NAVY

There is no Navy equivalent for the Army item.

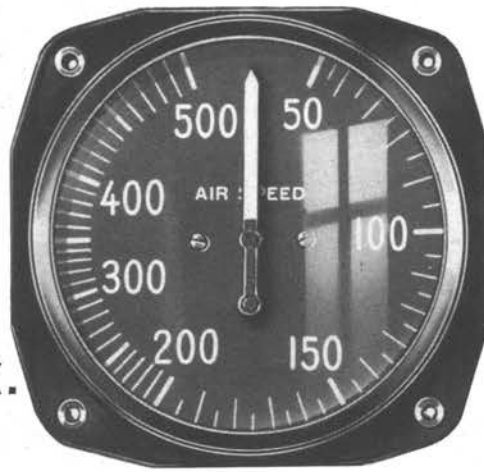
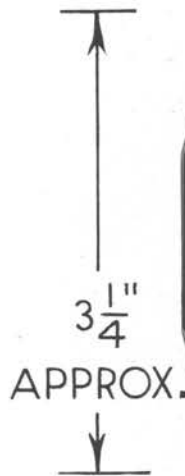
ALL MODELS BELOW ARE INTERCHANGEABLE
Models are used in services as noted in column 3
A-Army, N-Navy, B-British, C-Commercial

Manufacturer	Manufacturer's Drawing Number	Used By	Air Service Command Stock Number	Army Technical Order Number	British Reference Number
Kollsman Instrument Division	586S-025	A-B	6000185450	05-10-4 05-10-2	106A/541
United States Gauge Co.	AW-2 3/4-27	A			

TYPE INTERCHANGEABILITY

A. A. F. Type
D-4

1 2/3 revolutions of pointer to cover entire speed range.



INDICATOR—AIRSPEED
ARMY TYPE D-7

NAMES: Airspeed indicator
Indicator assembly—airspeed

Indicator—airspeed (aircraft) pitot-static

DESCRIPTION: The Army type D-7 airspeed indicator is a differential pressure measuring instrument used to indicate the speed of the airplane through the air. The dial face contains graduations from 50 to 500 miles per hour; the graduations from 50 to 200 m.p.h. are open scale marking, and those from 200 to 500 are condensed scale markings.

CHARACTERISTICS:

- Dimensions.....approximately 3 1/4 by 3 1/4 by 3 1/16 inches
- Weight.....approximately 1 pound
- Range.....50 to 500 miles per hour
- Dial size.....2 3/4 inches diameter
- Lighting.....radioactive luminous markings
- Connections.....1/8 inch internal pipe thread with type 811 fittings installed.

RELATIONSHIP OF PARTS: Used with:

Pitot-static airspeed tube or a combination of a pitot airspeed tube and a flush static airspeed tube.

ARMY

A. E. REFERENCE NUMBER: 60-4800

SPECIFICATIONS:

- General.....94-27187
- Detail.....94-27953

TYPE DESIGNATION: D-7

A. S. C. STOCK NUMBER: Refer to chart.

TECHNICAL ORDER NUMBER: Refer to chart.

PRODUCTION STATUS: Under procurement. Will be superseded by Army type F-2 airspeed indicator.

SHIPPING DATA: Shipped as a complete unit.

NAVY

There is no Navy equivalent for the Army item.

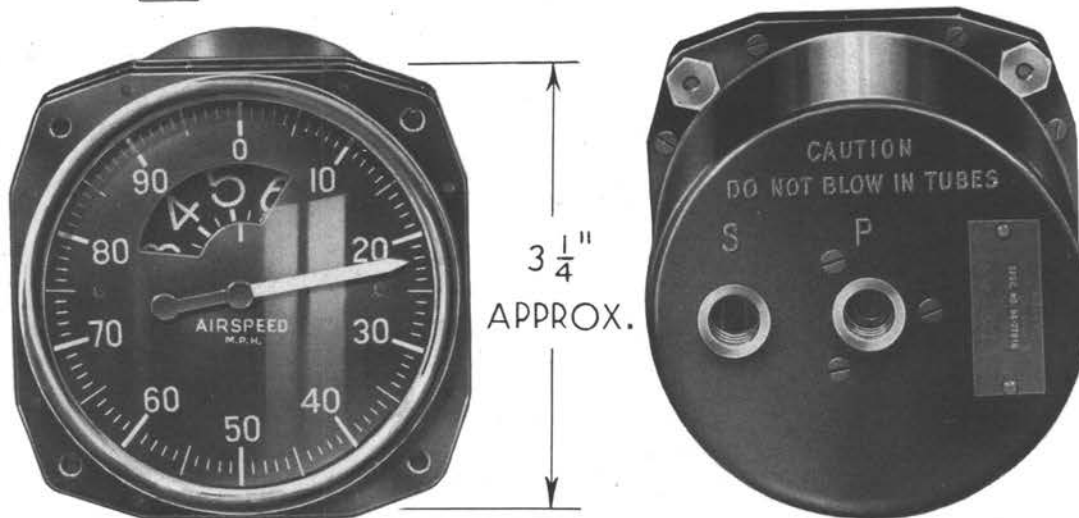
ALL MODELS BELOW ARE INTERCHANGEABLE
Models are used in services as noted in column 3
A-Army, N-Navy, B-British, C-Commercial

Manufacturer	Manufacturer's Drawing Number	Used By	Air Service Command Stock Number	Army Technical Order Number	British Reference Number
Kollsman Instrument Division	586K-026	A-B-C	6000185530	05-10-4 05-10-2	106A/1065
	586K-028	A-B	6000185535		106A/1065
	586BK-029	A-B			106A/1065
	586K-018	C			
	657BK-0126	C			
	657BK-0137*	C			
United States Gauge Co.	AW-2 3/4-16V	A-B			106A/1065

*Has radioactive luminous and fluorescent dial markings.



AIRSPEED INDICATORS INSTRUMENTS — FLIGHT



INDICATOR — AIRSPEED ARMY TYPE F-1

NAMES: Airspeed indicator
Indicator assembly — airspeed

Indicator — airspeed (aircraft) pitot-static
Sensitive airspeed indicator

DESCRIPTION: The Army type F-1 is a sensitive airspeed indicator. The pointer makes one revolution every hundred miles per hour. A smaller inner dial indicates hundreds of miles per hour.

CHARACTERISTICS:

- Dimensions approximately 3 1/4 by 3 1/4 by 3 1/8 inches
- Weight approximately 1 pound
- Range 50 to 700 miles per hour
- Dial size 2 3/4 inches diameter
- Lighting fluorescent and fluorescent radioactive markings
- Connections 1/8 inch internal pipe thread

RELATIONSHIP OF PARTS: Used with:

Pitot-static airspeed tube, or a combination of a pitot airspeed tube and a flush static airspeed tube.

ARMY

A. E. REFERENCE NUMBER: 60-4900

SPECIFICATIONS:

- General 94-27187
- Detail 94-27916-A

TYPE DESIGNATION: F-1

A. S. C. STOCK NUMBER: Refer to chart.

TECHNICAL ORDER NUMBER: Refer to chart.

PRODUCTION STATUS: Under procurement.

SHIPPING DATA: Shipped as a complete unit.

NAVY

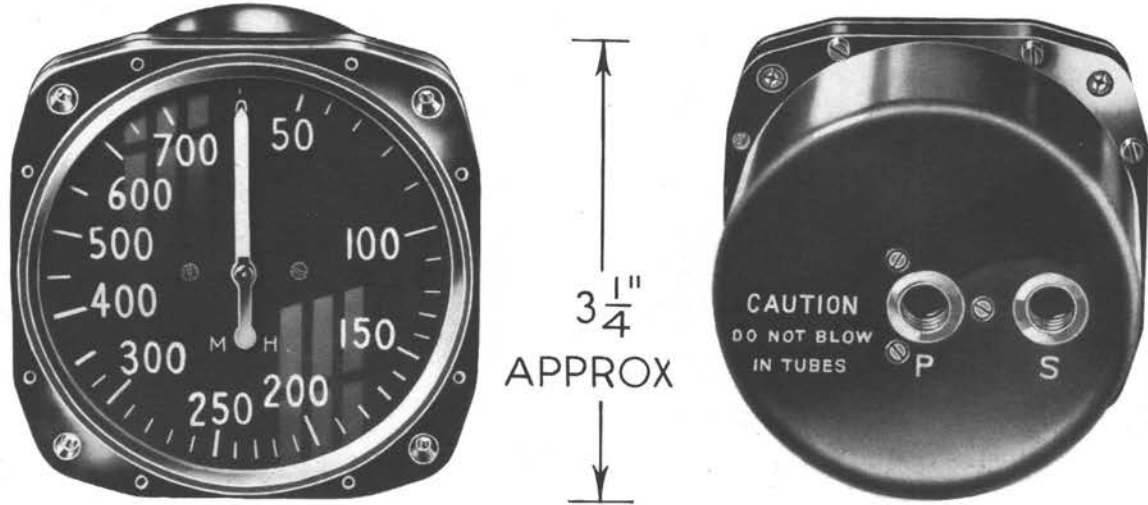
There is no Navy equivalent for this item.

ALL MODELS BELOW ARE INTERCHANGEABLE
Models are used in services as noted in column 3
A-Army, N-Navy, B-British, C-Commercial

Manufacturer	Manufacturer's Drawing Number	Used By	Air Service Command Stock Number	Army Technical Order Number	British Reference Number
Pioneer Instrument Division	1432-22B-A1	A-B	6000186850	05-10-4 05-10-2	106A/1110
	1432-22B-A-A1	A-B			106A/1110
	1432-22C-A-A1	C			
Kollsman Instrument Division	739K-03	A-B	6000174770		106A/1110
	739K-07	B-C			106A/1110
United States Gauge Co.	AW-2 3/4-31-C	A-B	6000185595		106A/1110

TYPE INTERCHANGEABILITY

- A. A. F. Type
- F-2 Non-sensitive type, case depth 2 3/16 inches.
- F-3 Non-sensitive type, case depth 2 inches. Fluorescent markings only, for night fighters.



INDICATOR—AIRSPEED
ARMY TYPE F-2

NAMES: Airspeed indicator
Indicator assembly—airspeed

Indicator—airspeed (aircraft) pitot-static

DESCRIPTION: The Army type F-2 airspeed indicator is a differential pressure measuring instrument, used to indicate the speed of the airplane through the air. The dial face is designed for external fluorescent lighting, and has a range of 50 to 700 miles per hour.

CHARACTERISTICS:

- Dimensions..... approximately 3 1/4 by 3 1/4 by 2 1/8 inches
- Weight..... approximately 1 pound
- Range..... 50 to 700 miles per hour
- Dial size..... 2 3/4 inches diameter
- Lighting..... fluorescent and fluorescent radioactive markings
- Connections..... 1/8 inch internal pipe thread

RELATIONSHIP OF PARTS: Used with:

Pitot-static airspeed tube, or a combination of a pitot airspeed tube and a flush static airspeed tube.

ARMY

A. E. REFERENCE NUMBER: 60-4925

SPECIFICATIONS:

- General..... 94-27187
- Detail..... 94-27335A

TYPE DESIGNATION: F-2

A. S. C. STOCK NUMBER: Refer to chart.

TECHNICAL ORDER NUMBER: Refer to chart.

PRODUCTION STATUS: Under procurement.

SHIPPING DATA: Shipped as a complete unit.

NAVY

There is no Navy equivalent for the Army item.

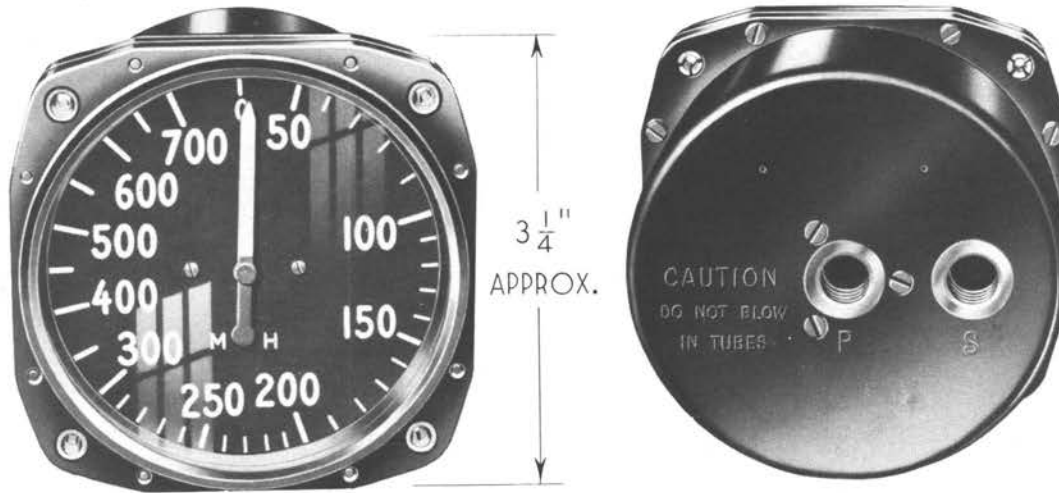
ALL MODELS BELOW ARE INTERCHANGEABLE
Models are used in services as noted in column 3
A-Army, N-Navy, B-British, C-Commercial

Manufacturer	Manufacturer's Drawing Number	Used By	Air Service Command Stock Number	Army Technical Order Number	British Reference Number
Pioneer Instrument Division	1426-37A-A6	A-B	6000186920	05-10-4	106A/1087
	1426-37F-A6	A-B		05-10-2	
Kollsman Instrument Division	586BK-0142	A-B	6000186905		106A/1087
	586BK-0149	B-C			
The Lackner Co.	PE-22251-2	A-B	6000186910	05-10-4	106A/1087
				05-10-2	

TYPE INTERCHANGEABILITY

A. A. F. Type
F-1

Sensitive type. Case depth 3 1/8 inches.



INDICATOR — AIRSPEED

ARMY TYPE F-3

NAMES: Airspeed indicator
Indicator assembly—airspeed

Indicator—airspeed (aircraft) pitot-static

DESCRIPTION: The Army type F-3 airspeed indicator is a differential pressure measuring instrument, used to indicate the speed of the airplane through the air. The dial face is graduated throughout the range, from 50 to 700 miles per hour. The markings are of fluorescent material only, since the indicator is for use on night fighter aircraft.

CHARACTERISTICS:

- Dimensions approximately 3 1/4 by 3 1/4 by 2 1/8 inches
- Weight approximately 1 pound
- Range 50 to 700 miles per hour
- Dial size 2 3/4 inches diameter
- Lighting fluorescent markings

RELATIONSHIP OF PARTS: Used with:

Pitot-static airspeed tube, or a combination of a pitot airspeed tube and a flush static airspeed tube.

ARMY

A. E. REFERENCE NUMBER: 60-4950

SPECIFICATIONS:

- General 94-27187
- Detail 94-27406

TYPE DESIGNATION: F-3

MANUFACTURER: Pioneer Instrument Division of Bendix Aviation Corp.

MANUFACTURER'S PART NUMBER: 1426-37E-A6

PRODUCTION STATUS: Under procurement.

SHIPPING DATA: Shipped as a complete unit.

NAVY

There is no Navy equivalent for the Army item.

BRITISH

BRITISH REFERENCE NUMBER: 106A/1405



AIRSPEED TUBES

Airspeed tubes are used to furnish impact and static pressures for the operation of various aircraft flight instruments. Impact pressure is the resistance encountered by an object moving through the air. Static pressure is the atmospheric pressure of the air at whatever altitude the airplane may be flying. Static pressure is supplied for the accurate operation of the altimeter and rate-of-climb indicator. The pressure differential between the impact and static pressures operates the airspeed indicator.

In order to obtain the two different air pressures, there must be two air inlets. These are generally combined in a single unit known as the pitot-static tube.

One type consists of a metal casing, inside of which is a pitot tube with its forward end open to receive the full impact pressure. Around the side of the casing, usually at the top and bottom, are small holes which admit static air. To prevent the formation of ice in and around the tube, this type is electrically heated.

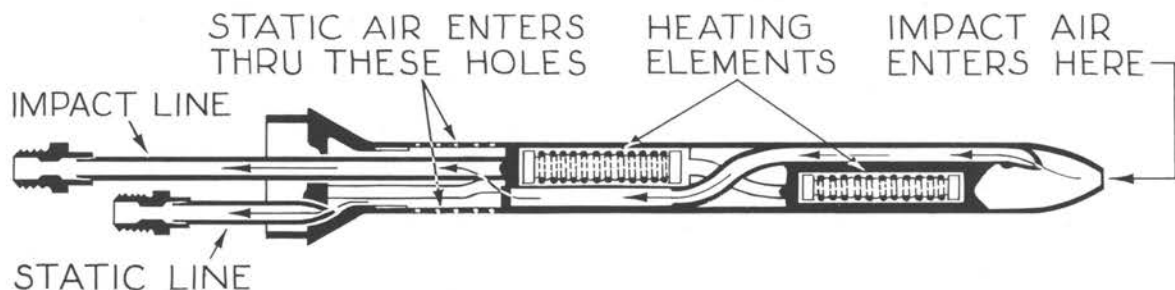
Another type of airspeed tube employs two pieces of tubing of the same size. One, having an open end, measures the impact pressure. The other, having a closed end with holes along the side, measures the static pressure. This type is unheated.

More recent installations completely separate the two sources of air pressure. The impact pressure is obtained from a heated tube which has its open end pointing forward. The static pressure is obtained from a flush type static tube, which is located on the side of the fuselage. The static tube is a small circular flange with several small holes in it, and it mounts flush with the surface of the fuselage. Two of these are usually used for each installation, one on each side of the fuselage, to offset inaccurate readings which may be caused by air blowing directly into one tube in case of strong side winds.

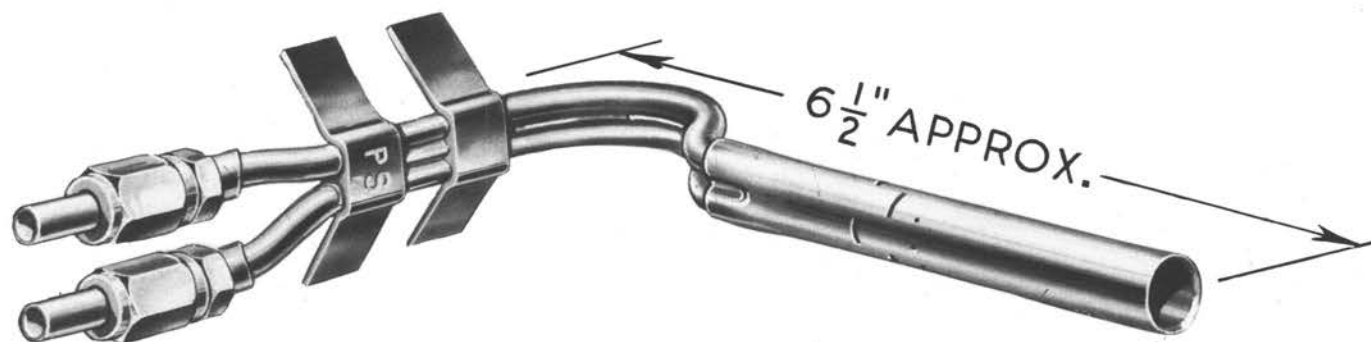
Airspeed tubes are mounted on the leading edge of the wing or on the nose of the airplane. This is done so that the air pressure will not be disturbed by the slipstream or movement of the airplane.

The sources of impact and static pressure are connected to the aircraft instruments by air tight tubing.

Methods of installation of pitot tube and static tube combinations are specified in Army-Navy Specification AN-I-4 and Army Air Forces Specification 27380-A.



CUTAWAY VIEW OF A PITOT-STATIC TUBE



TUBE — PITOT-STATIC AIRSPEED

ARMY TYPE B-6

NAMES: Pitot-static airspeed tube	Pitot tube (B-6)
Tube assembly—airspeed type B-6	Airspeed tube
Pitot-static tube	

DESCRIPTION: This airspeed tube supplies impact and static pressures for operation of instruments. It is of the light weight, non-freezing type, for strut mounting on small airplanes. No provision is made for heating.

CHARACTERISTICS:

Dimensions.....	approximately 6½ by 3¾ by 1⅝ inches
Weight.....	approximately ¼ pound
Range.....	up to 140 miles per hour
Fittings.....	AN800-3 and AN805-3

ARMY

A. E. REFERENCE NUMBER: 60-8800

SPECIFICATIONS:

General.....	None
Detail.....	94-27716
Superseded.....	None

A. A. F. DRAWING NUMBER: 33B1639

TYPE DESIGNATION: B-6

MANUFACTURER: Kollsman Instrument Division of Square D Company

MANUFACTURER'S TYPE AND DRAWING NUMBER: Type 10 and drawing number 10-900

A. S. C. STOCK NUMBER: 6000446750

TECHNICAL ORDER NUMBER: 05-50-1

PRODUCTION STATUS: Not under procurement for initial installation. Superseded by AN5815, A. E. Reference Number 60-8810.

SHIPPING DATA: Shipped as a complete unit.

NAVY

There is no Navy equivalent for this Army item.

BRITISH

BRITISH REFERENCE NUMBER: 106A/1011



TUBE — PITOT-STATIC AIRSPEED

AN 5815-1 F. S. S. C. NUMBER 88-T-2900

NAMES: Pitot-static airspeed tube	Pitot-static tube
Tube, pitot-static unheated, biplane	Airspeed tube
Pitot tube	Tube, pitot-static, unheated type

DESCRIPTION: This airspeed tube supplies impact and static pressures for the operation of instruments. It is of light construction, and has a rainproof head for vertical mounting. No provision is made for heating the tube. Flare type aluminum alloy fittings are provided for 1/4 inch connecting tubing.

CHARACTERISTICS:

Dimensions.....	approximately 4 3/4 by 4 1/2 by 4 1/2 inches
Weight.....	approximately 1/4 pound
Range.....	up to 250 miles per hour
Couplings.....	AN786-1

ARMY

A. E. REFERENCE NUMBER: 60-8810

SPECIFICATIONS:

Detail.....	AN-GG-T-791
Superseded.....	94-27716

AN DRAWING NUMBER: AN5815

AN PART NUMBER: AN5815-1

MANUFACTURER: Kollsman Instrument Division of Square D Company

MANUFACTURER'S TYPE AND DRAWING NUMBER: Type 14B and drawing number 14B-900

TECHNICAL ORDER NUMBER: 05-50-1

PRODUCTION STATUS: Under procurement. Supersedes Army type B-6 pitot-static tube.

SHIPPING DATA: Shipped as a complete unit.

NAVY

TYPE DESIGNATION: None

SPECIFICATIONS:

Detail.....	AN-GG-T-791
-------------	-------------

BUREAU OF AERONAUTICS: SQ-107

AN DRAWING NUMBER: AN5815

AN PART NUMBER: AN5215-1

F. S. S. C. STOCK NUMBER: 88-T-2900

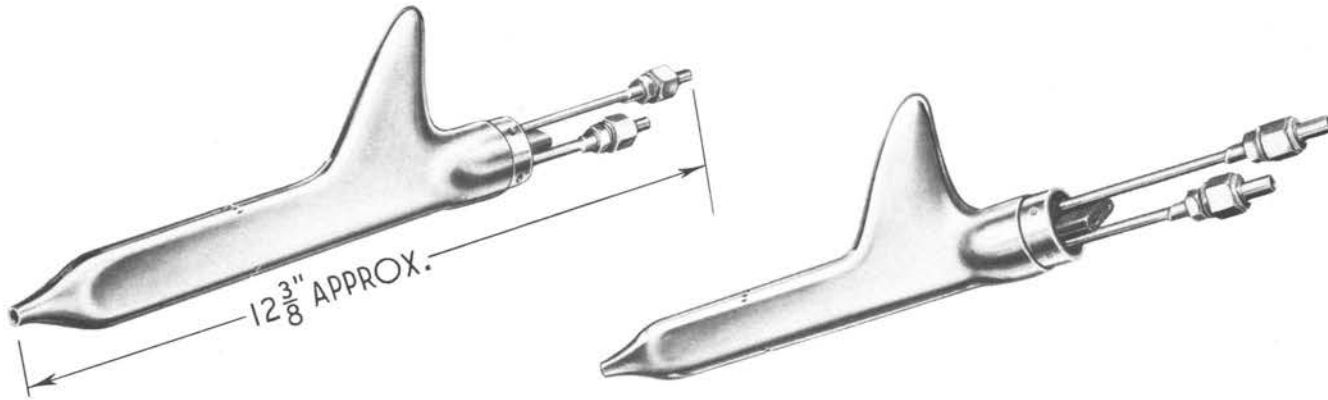
PROCUREMENT STATUS: Standard. G. F. E.—Order through A. S. O. by F. S. S. C. Number.

BRITISH

BRITISH REFERENCE NUMBER: 106A/438



AIRSPPEED TUBES INSTRUMENTS — FLIGHT



TUBE — PITOT-STATIC AIRSPPEED

AN 5816-1 FORMER ARMY TYPE C-7 F. S. S. C. NUMBER 88-T-3300

NAMES: Pitot-static airspeed tube
Airspeed tube
Pitot tube

Tube, electrically heated pitot-static
Tube, pitot-static (head pressure) heated type
Pitot-static tube

DESCRIPTION: This pitot-static airspeed tube supplies impact and static pressures for the operation of instruments. It is made of copper shark-fin, plain tube or extended nose construction, with a dull nickel finish, and contains two integral heaters. It is mounted horizontally at the forward end of a round tube on the leading edge of the wing. The shark fin section encloses water traps, to prevent the entry of rain or condensed moisture into the pressure lines.

CHARACTERISTICS:

Dimensions..... approximately 12³/₈ by 3¹/₄ by 1¹/₄ inches
Weight..... approximately 1 pound
Range..... up to 250 miles per hour
Heater voltage..... 12 volts, direct current, 2-wire
Heater power..... approximately 150 watts
Couplings..... AN786-1

ARMY

A. E. REFERENCE NUMBER: 60-9000

SPECIFICATIONS:

Detail..... AN-T-1
Superseded..... 94-27884-A

AN DRAWING NUMBER: AN5816

AN PART NUMBER: AN5816-1

TYPE DESIGNATION: Former type C-7

A. S. C. STOCK NUMBER: 6000449750 (procurement stock number)

TECHNICAL ORDER NUMBER: Refer to chart.

PRODUCTION STATUS: Under procurement. Supersedes Army Type C-7 pitot-static tube.

SHIPPING DATA: Shipped as a complete unit, including electrical plug for heaters.

NAVY

SPECIFICATIONS:

Detail..... AN-T-1
Superseded..... SE-6A

AN DRAWING NUMBER: AN5816

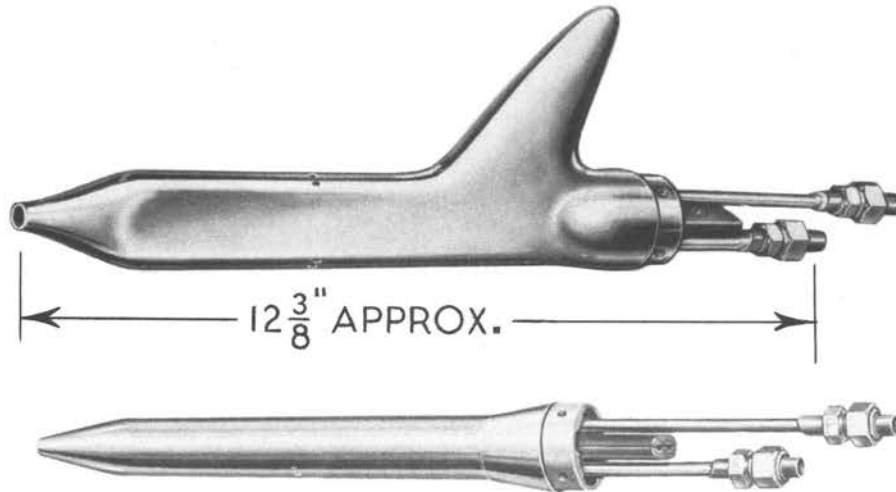
AN PART NUMBER: 5816-1

F. S. S. C. NUMBER: 88-T-3300

PROCUREMENT STATUS: Standard. G. F. E.—Order through A. S. O. by F. S. S. C. Number.

ALL MODELS BELOW ARE INTERCHANGEABLE
Models are used in services as noted in column 4
A-Army, N-Navy, B-British, C-Commercial

Manufacturer	Manufacturer's Model Identification	Manufacturer's Drawing Number	Used By	Air Service Command Stock Number	Army Technical Order Number	British Reference Number	Remarks
Kollsman Instrument Division	369D-01	369D-01	A-N-B	6000449750	05-50-1	106A/636	
	171	171	A	6000444290	05-50-1		Army type C-1; obsolete.
	171B	171B	A	6000448000	05-50-1		Army type C-1R; obsolete.
Pioneer Instrument Div.	357-G-940	357-G-940	A	6000445250	05-50-1		
Aero Instrument Co.	PST-300-4		N				



TUBE—PITOT-STATIC AIRSPEED

AN5816-2 F. S. S. C. NUMBER 88-T-3305

NAMES: Pitot-static airspeed tube Tube—pitot-static (heads pressure)
Tube—airspeed (aircraft—24 volt system) Pitot-static tube
Tube—electrically heated pitot-static Airspeed tube

DESCRIPTION: This airspeed tube supplies impact and static pressures for the operation of flight instruments. It is of shark-fin construction, with a dull finish, and contains two integral heaters. The tube is mounted horizontally at the forward end of a round tube on the leading edge of the wing. The shark-fin section encloses water traps, to prevent entry of moisture into the air lines.

CHARACTERISTICS:

Dimensions.....approximately 12³/₈ by 3¹/₄ by 1¹/₄ inches
Weight.....approximately 1 pound
Range.....up to 250 miles per hour
Heater voltage.....24 volt, direct current, 2 wire
Heater power.....approximately 135 watts
Couplings.....AN786-1

ARMY

A. E. REFERENCE NUMBER: 60-9200

SPECIFICATIONS:

Detail.....AN-T-1
Superseded.....94-27876-A

AN DRAWING NUMBER: AN5816

AN PART NUMBER: AN5816-2

A. S. C. STOCK NUMBER: 6000451150 (procurement stock number). Refer to chart.

TECHNICAL ORDER NUMBER: Refer to chart.

PRODUCTION STATUS: Under procurement. Supersedes Army type D-1 pitot-static tube.

SHIPPING DATA: Shipped as a complete unit.

NAVY

SPECIFICATIONS:

Detail.....AN-T-1
Superseded.....SE-6A

AN DRAWING NUMBER: AN5816

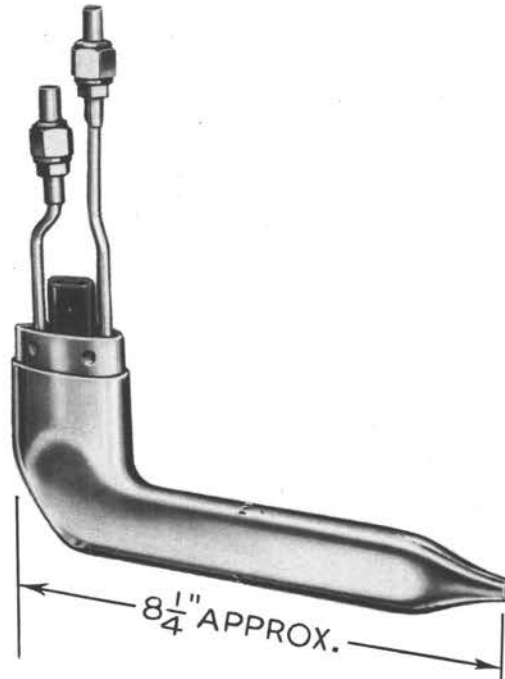
AN PART NUMBER: AN5816-2

F. S. S. C. STOCK NUMBER: 88-T-3305

PROCUREMENT STATUS: Standard. G. F. E.—Order through A. S. O. by F. S. S. C. number.

ALL MODELS BELOW ARE INTERCHANGEABLE
Models are used in services as noted in column 4
A-Army, N-Navy, B-British, C-Commercial

Manufacturer	Manufacturer's Model Identification	Manufacturer's Drawing Number	Used By	Air Service Command Stock Number	Army Technical Order Number	British Reference Number	Remarks
Westinghouse Electric and Mfg. Co.	1214448	4-A-8292	A-B	6000451050	05-50-1	106A/334	
Kollsman Instrument Div.	369D-02	369D-02	A-N-B	6000451000	05-50-1	106A/334	150 watt heaters. Remove fittings and substitute AN786-1 couplings
Manning Bowman & Co.	126-108	126-108	A-B	6000450875	05-50-1	106A/334	
Aero Instrument Co.	PST-300		N				



TUBE—PITOT-STATIC AIRSPEED

ARMY TYPE D-2 F. S. S. C. NUMBER 88-T-3310

NAMES: Pitot-static airspeed tube	Pitot-static tube
Airspeed tube	Tube—pitot-static (heads pressure)
Tube, airspeed, type D-2 (aircraft—24 volt system)	Tube—electrically heated pitot-static

DESCRIPTION: This Army type D-2 airspeed tube supplies impact and static pressures for instrument operation. It is of plain tube construction, has a dull nickel finish, and contains two integral heaters. The heating elements are hermetically sealed within a heat conductive copper shell. The tube is designed for installation on a tapered streamline mast extending below and forward of the airplane nose.

CHARACTERISTICS:

Dimensions	approximately 8 1/4 by 6 9/16 by 7/8 inches
Weight	approximately 1 pound
Range	up to 250 miles per hour
Heater voltage	24 volt, direct current, 2 wire
Heater power	approximately 100 watts
Couplings	AN786-1

ARMY

A. E. REFERENCE NUMBER: 60-9400

SPECIFICATIONS:

Detail	94-27874-B
Superseded	94-27874-A

TYPE DESIGNATION: D-2

A. S. C. STOCK NUMBER: Refer to chart.

TECHNICAL ORDER NUMBER: Refer to chart.

PRODUCTION STATUS: Under procurement.

SHIPPING DATA: Shipped as a complete unit.

NAVY

SPECIFICATIONS:

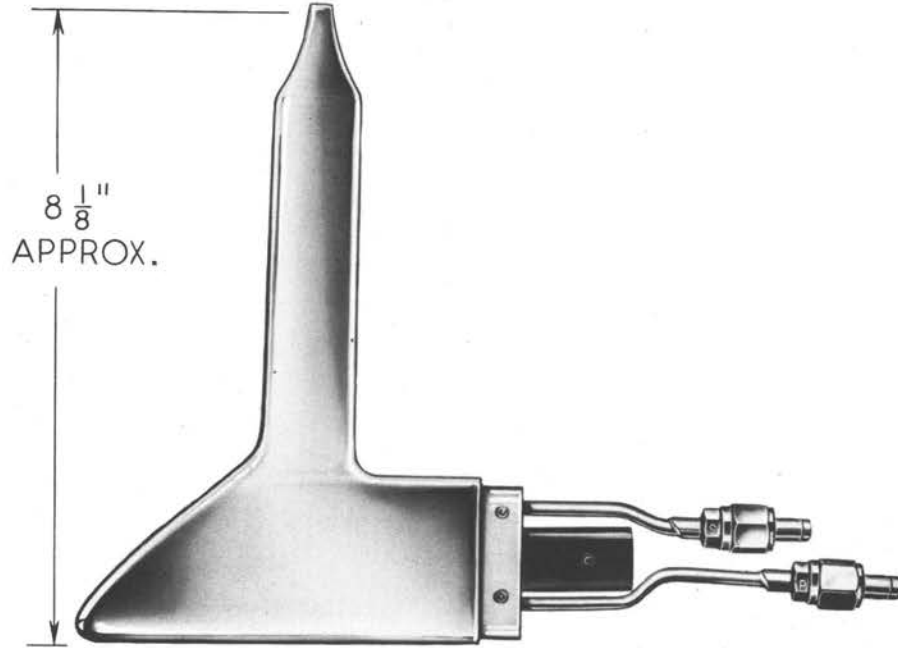
Detail Uses Army Spec. 94-27874

F. S. S. C. STOCK NUMBER: 88-T-3300

PROCUREMENT STATUS: Standard. G. F. E.—Order through A. S. O. by F. S. S. C. number.

MODELS BELOW ARE INTERCHANGEABLE
Models are used in services as noted in column 3
A-Army, N-Navy, B-British, C-Commercial

Manufacturer	Manufacturer's Part and Drawing Number	Used By	Air Service Command Stock Number	Army Technical Order Number	British Reference Number	Remarks
Kollsman Instrument Division	373D-02	A-N-B	6000451500	05-50-1	106A/916	The heaters of this tube provide 110 watts.
Dominion Electric & Manufacturing Co.	PT-100	A-B		05-50-1	106A/916	



TUBE — PITOT-STATIC AIRSPEED
ARMY TYPE D-3

NAMES: Pitot-static airspeed tube
 Tube—airspeed; type D-3 (aircraft—24 volt system)
 Tube—electrically heated pitot-static

Pitot tube
 Pitot-static tube
 Airspeed tube (pitot-static)

DESCRIPTION: This Army type D-3 airspeed tube supplies impact and static pressures for the operation of instruments. It is of copper fin construction with dull nickel finish, and contains two integral heaters. It is mounted on the top of a vertical streamline strut. The fin section encloses the water traps, to prevent entry of moisture into the pressure lines.

CHARACTERISTICS:

Dimensions	approximately 8 1/8 by 8 3/4 by 7/8 inches
Weight	approximately 1 1/4 pounds
Range	up to 250 miles per hour
Heater voltage	24 volt, direct current, 2-wire
Heater power	approximately 125 watts
Couplings	AN786-1

ARMY

A. E. REFERENCE NUMBER: 60-9600

SPECIFICATIONS:

Detail	94-27909-B
Superseded	94-27909-A

TYPE DESIGNATION: D-3

MANUFACTURER: Kollsman Instrument Division of Square D Company

MANUFACTURER'S PART AND DRAWING NUMBER: 595B-02

TECHNICAL ORDER NUMBER: 05-50-1

PRODUCTION STATUS: Not under procurement for initial installation.

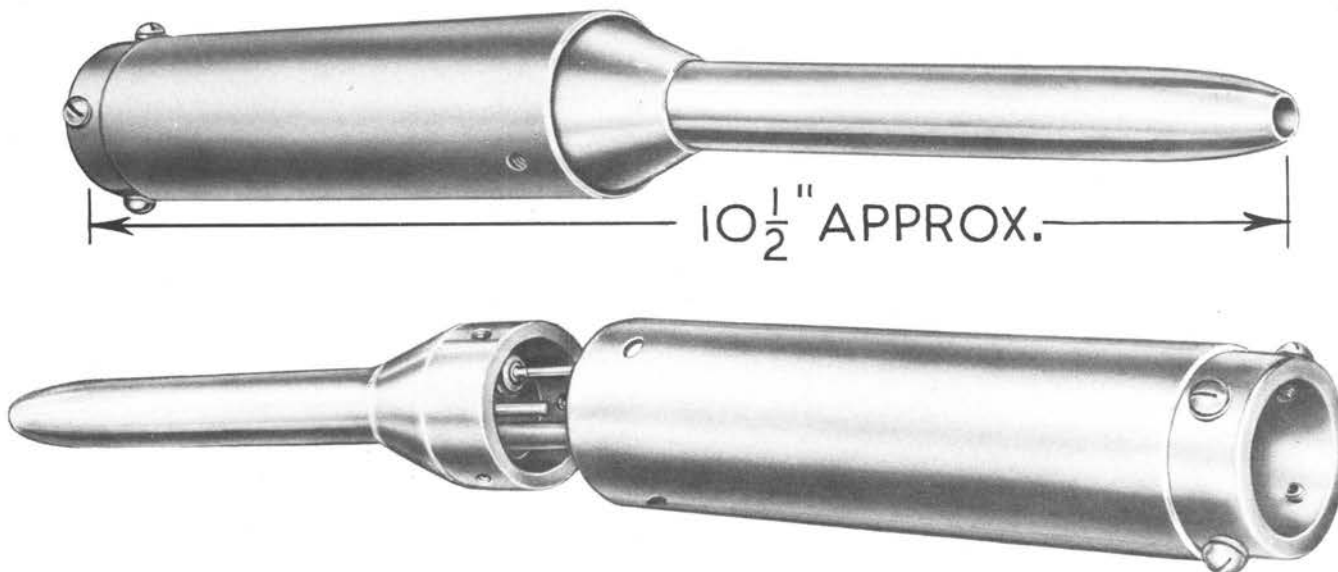
SHIPPING DATA: Shipped as a complete unit.

NAVY

There is no Navy equivalent for the Army item.

BRITISH

BRITISH REFERENCE NUMBER: 106A/1330



TUBE — PITOT AIRSPEED
ARMY TYPE G-1

NAMES: Pitot airspeed tube
Tube assembly—airspeed
Tube; airspeed, type G-1 (aircraft, pitot—24 volt system)

Chromalox type G-1 airspeed tube
Airspeed tube

DESCRIPTION: This airspeed tube supplies impact pressure for the operation of instruments. It has a copper nose and a brass mounting section, including a steel sleeve. The nose of the tube contains a single heating element.

CHARACTERISTICS:

Dimensions 10½ by 1¼ by 1¼ inches (including mounting sleeve)
Weight approximately 7/8 pound
Range up to 600 miles per hour
Heater voltage 24 volt, direct current, 2 wire
Heater power 80 watts
Couplings AN786-1

RELATIONSHIP OF PARTS: Used with:
One or two flush static tubes, A. E. Reference Number 60-9700.

ARMY

A. E. REFERENCE NUMBER: 60-9640

SPECIFICATIONS:

Detail 27378

TYPE DESIGNATION G-1

A. S. C. STOCK NUMBER: Refer to chart.

TECHNICAL ORDER NUMBER: Refer to chart.

PRODUCTION STATUS: Under procurement.

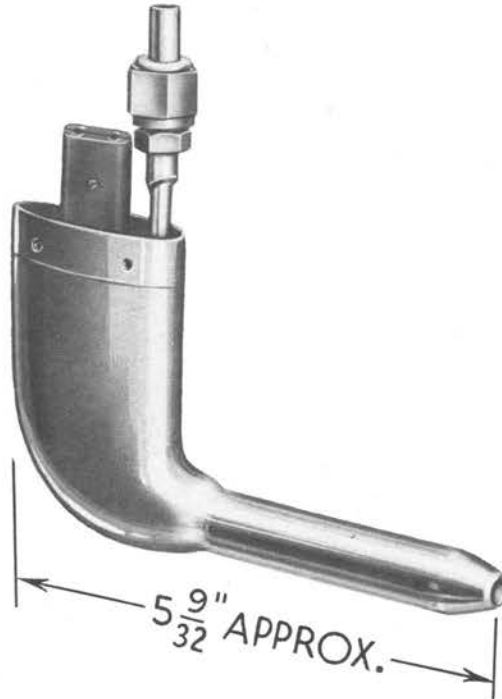
SHIPPING DATA: Shipped as a complete unit, including electrical plug for heater.

NAVY

There is no Navy equivalent for this item.

ALL MODELS BELOW ARE INTERCHANGEABLE
Models are used in services as noted in column 4
A-Army, N-Navy, B-British, C-Commercial

Manufacturer	Manufacturer's Part Identification	Manufacturer's Drawing Number	Used By	Army Technical Order Number
Edwin L. Wiegand Co.	BP-10443-A	1-10443	A	05-50-1
Kollsman Instruments Division	781-02	781-02	A	
Manning Bowman & Co.	126-104	126-104	A	



TUBE—PITOT AIRSPEED
ARMY TYPE G-2

NAMES: Pitot airspeed tube Tube—airspeed; type G-2 (aircraft, pitot—24 volt system)
Airspeed tube Chromalox type G-2 airspeed tube

DESCRIPTION: The Army type G-2 airspeed tube supplies impact pressure for the operation of instruments. It is a copper nose tube with a brass mounting section, and is installed on the left side of the fuselage of multi-engine airplanes. One heating element is provided, in the nose of the tube.

CHARACTERISTICS:

Dimensions approximately 5⁹/₃₂ by 4³/₈ by ³/₄ inches
Weight approximately ³/₄ pound
Range up to 600 miles per hour
Heater voltage 24 volt, direct current, 2 wire
Heater power approximately 80 watts
Couplings AN786-1

RELATIONSHIP OF PARTS:

This pitot airspeed tube is used with one or two flush static airspeed tubes, A. E. Reference Number 60-9700.

ARMY

A. E. REFERENCE NUMBER: 60-9650

SPECIFICATIONS:

Detail 94-27389
Superseded 27389

TYPE DESIGNATION: G-2

TECHNICAL ORDER NUMBER: Refer to chart.

PRODUCTION STATUS: Under procurement.

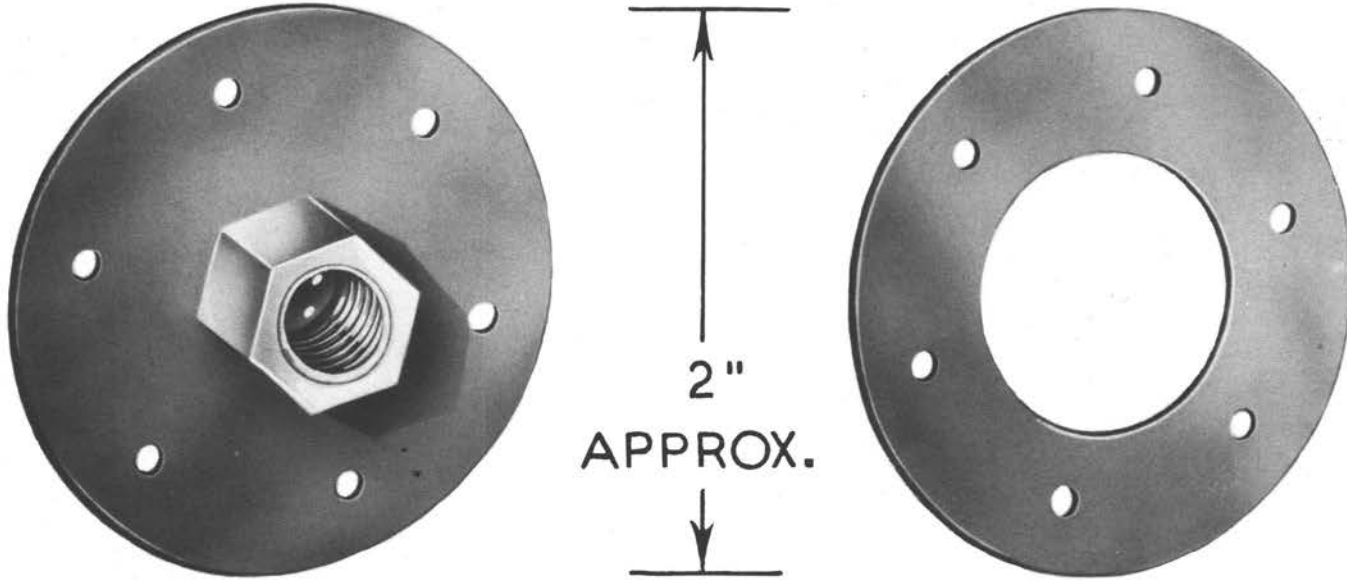
SHIPPING DATA: Shipped as a complete unit.

NAVY

There is no Navy equivalent for this item.

ALL MODELS BELOW ARE INTERCHANGEABLE
Models are used in services as noted in column 4
A-Army, N-Navy, B-British, C-Commercial

Manufacturer	Manufacturer's Model Identification	Manufacturer's Drawing Number	Used By	Army Technical Order Number	British Reference Number
Edwin L. Wiegand Co.	BC-20585-A	1-20585	A-B	05-50-1	106A/1329
Kollsman Instrument Division	782-02	782-02	A-B		106A/1329
Manning Bowman & Co.	126-105	126-105	A-B		106A/1329



TUBE — FLUSH STATIC PRESSURE

ARMY DRAWING NUMBER 42A13995

NAMES: Flush static pressure tube
Flush-mounted static tube
Static tube

DESCRIPTION: This static pressure tube is used in conjunction with pitot tubes to supply static pressure for the operation of instruments. No heating is necessary. It is an aluminum alloy casting with a center tubing threaded section. A reinforcing ring is installed outside the airplane skin, along the side of the fuselage. The tube is placed inside the airplane skin, and rivets are passed through the tube, skin and reinforcing ring.

These tubes are usually used in pairs, with one installed on each side of the fuselage.

CHARACTERISTICS:

- Dimensions..... approximately 2 inches in diameter
- Weight..... approximately 1/2 ounce
- Tubing connection..... 1/8 inch internal pipe thread

RELATIONSHIP OF PARTS: Used with:

Reinforcing ring Army Drawing Number 42A11521 furnished with it. This flush static tube is used with Army type G-1 or G-2 pitot airspeed tubes, A. E. Reference Numbers 60-9640 and 90-9650, to furnish differential pressures for operation of instruments.

ARMY

A. E. REFERENCE NUMBER: 60-9700

A. A. F. DRAWING NUMBER: 42A13995

MANUFACTURERS: Gerity-Andrain Manufacturing Corporation, A. A. F. Drawing Number 42A13995.
National Die Casting Company, A. A. F. Drawing Number 42A13995.

PRODUCTION STATUS: Under procurement.

SHIPPING DATA: Shipped complete with reinforcing ring.

NAVY

There is no Navy equivalent for this item.